

## **Synapsin-1 Polyclonal Antibody**

Catalog No: YT5737

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;ELISA;IHC

Target: Synapsin I

Gene Name: SYN1

Protein Name: Synapsin-1

Human Gene Id: 6853

**Human Swiss Prot** 

No:

Mouse Gene ld: 20964

**Mouse Swiss Prot** 

No:

Rat Swiss Prot No: P09951

**Immunogen:** Synthesized peptide derived from the Internal region of human Synapsin-1.

**Specificity:** Synapsin-1 Polyclonal Antibody detects endogenous levels of Synapsin-1

protein.

P17600

O88935

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500-2000;IHC 1:50-300; ELISA 2000-20000

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

1/4



Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 75kD

**Background :** This gene is a member of the synapsin gene family. Synapsins encode neuronal

phosphoproteins which associate with the cytoplasmic surface of synaptic vesicles. Family members are characterized by common protein domains, and they are implicated in synaptogenesis and the modulation of neurotransmitter release, suggesting a potential role in several neuropsychiatric diseases. This member of the synapsin family plays a role in regulation of axonogenesis and synaptogenesis. The protein encoded serves as a substrate for several different protein kinases and phosphorylation may function in the regulation of this protein in the nerve terminal. Mutations in this gene may be associated with X-linked disorders with primary neuronal degeneration such as Rett syndrome. Alternatively spliced transcript variants encoding different isoforms have been

identified. [provided by RefSeq, Jul 2008],

**Function:** disease:Defects in SYN1 are a cause of epilepsy X-linked with variable learning

disabilities and behavior disorders [MIM:300491]. XELBD is characterized by variable combinations of epilepsy, learning difficulties, macrocephaly, and aggressive behavior.,function:Neuronal phosphoprotein that coats synaptic vesicles, binds to the cytoskeleton, and is believed to function in the regulation of neurotransmitter release. The complex formed with NOS1 and CAPON proteins

is necessary for specific nitric-oxid functions at a presynaptic

level.,PTM:Substrate of at least four different protein kinases. It is probable that phosphorylation plays a role in the regulation of synapsin-1 in the nerve terminal. Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the synapsin family.,subunit:Homodimer. Interacts with CAPON. Forms a

ternary complex with NOS1. Isoform Ib interacts with

Subcellular Location:

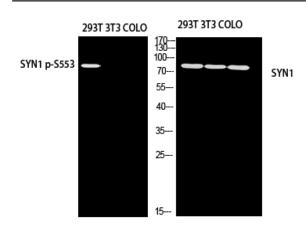
Cell junction, synapse. Golgi apparatus.

**Expression:** 

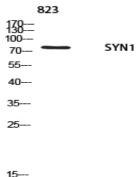
Brain, Brain cortex,

## **Products Images**

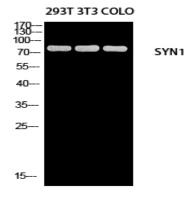
2/4



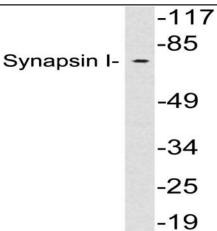
Western blot analysis of 293T 3T3 COLO using SYN1 antibody. Antibody was diluted at 1:1000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Western blot analysis of 823 using SYN1 antibody. Antibody was diluted at 1:1000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Western blot analysis of 293T 3T3 COLO using SYN1 antibody. Antibody was diluted at 1:1000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Western blot analysis of lysates from HeLa cells, using Synapsin I antibody.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).